

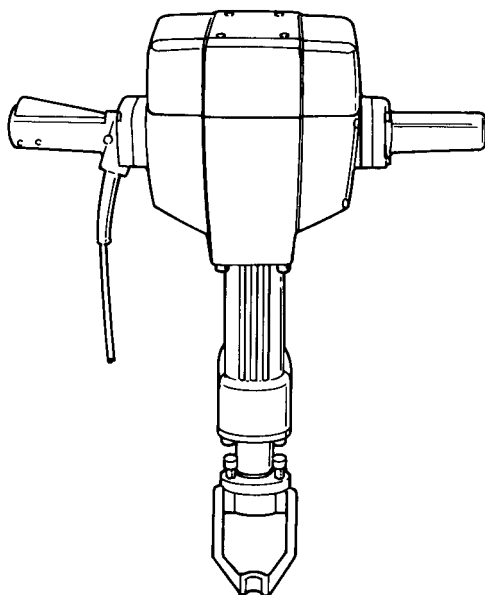
Makita

アメリカ

Breaker Hammer

MODEL HM1800

INSTRUCTION MANUAL



**DOUBLE
INSULATION**

SPECIFICATIONS

Blows per minute	Overall length	Net weight
1,000	818 mm (32-1/4")	29.1 kg (64 lbs)

* Manufacturer reserves the right to change specifications without notice.

* Note: Specifications may differ from country to country.

WARNING: For your personal safety, READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

IMPORTANT SAFETY INSTRUCTIONS

(For All Tools)

WARNING: WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:

READ ALL INSTRUCTIONS.

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
3. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Don't let visitors contact tool or extension cord.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
6. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended; for example, don't use circular saw for cutting tree limbs or logs.
7. **DRESS PROPERLY.** Don't wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
8. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
9. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
10. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
11. **DON'T OVERREACH.** Keep proper footing and balance at all times.
12. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
13. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is OFF when plugging in.
16. **EXTENSION CORDS.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

TABLE 1 MINIMUM GAGE FOR CORD SETS

			Total Length of Cord in Feet			
			0 – 25	26 – 50	51 – 100	101 – 150
Ampere Rating More Than	Not More Than		A W G			
0	—	6	18	16	16	14
6	—	10	18	16	14	12
10	—	12	16	16	14	12
12	—	16	14	12	Not Recommended	

17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate tool when you are tired.
19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Don't use tool if switch does not turn it on and off.
20. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
21. **REPLACEMENT PARTS.** When servicing, use only identical replacement parts.
22. **POLARIZED PLUGS.** To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

VOLTAGE WARNING: Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in **SERIOUS INJURY** to the user — as well as damage to the tool. If in doubt, **DO NOT PLUG IN THE TOOL**. Using a power source with voltage less than the nameplate rating is harmful to the motor.

ADDITIONAL SAFETY RULES

1. Wear a hard hat (safety helmet), safety glasses and/or face shield. It is also highly recommended that you wear a dust mask, ear protectors and thickly padded gloves.
2. Be sure the bit is secured in place before operation.
3. Under normal operation, the tool is designed to produce vibration. The screws can come loose easily, causing a breakdown or accident. Check tightness of screws carefully before operation.
4. In cold weather or when the tool has not been used for a long time, let the tool warm up for several minutes by operating it under no load. This will loosen up the lubrication. Without proper warm-up, hammering operation is difficult.
5. Always be sure you have a firm footing.
Be sure no one is below when using the tool in high locations.
6. Hold the tool firmly with both hands.
7. Keep hands away from moving parts.
8. Do not leave the tool running. Operate the tool only when hand-held.
9. Do not point the tool at any one in the area when operating. The bit could fly out and injure someone seriously.
10. When chipping into walls, floors or wherever “live” electrical wires may be encountered, **DO NOT TOUCH ANY METAL PARTS OF THE TOOL!**
Hold the tool by the insulated grasping surfaces to prevent electric shock if you chip into a “live” wire.
11. Do not touch the bit or parts close to the bit immediately after operation; they may be extremely hot and could burn your skin.

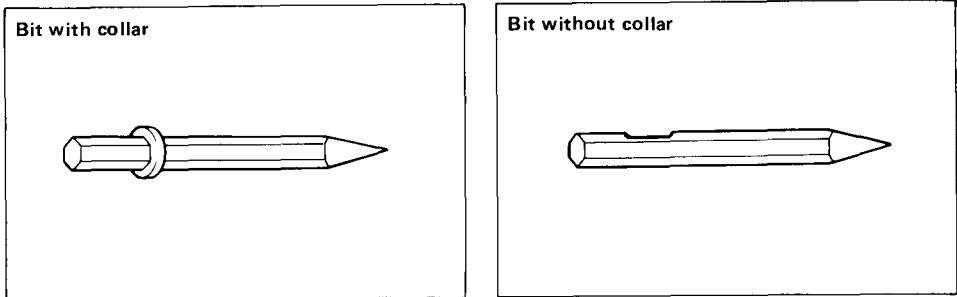
SAVE THESE INSTRUCTIONS.

Installing or removing bit

CAUTION:

Always be sure that the tool is switched off and unplugged before installing or removing the bit.

This tool accepts bits either with or without a collar on its shank.



To install the bit, follow either procedure (1) or (2) described below.

(1) For bits with a collar:

Pivot the tool retainer back and slightly downward. Insert the bit into the tool holder as far as it will go. To securely retain the bit, return the tool retainer to its original position.

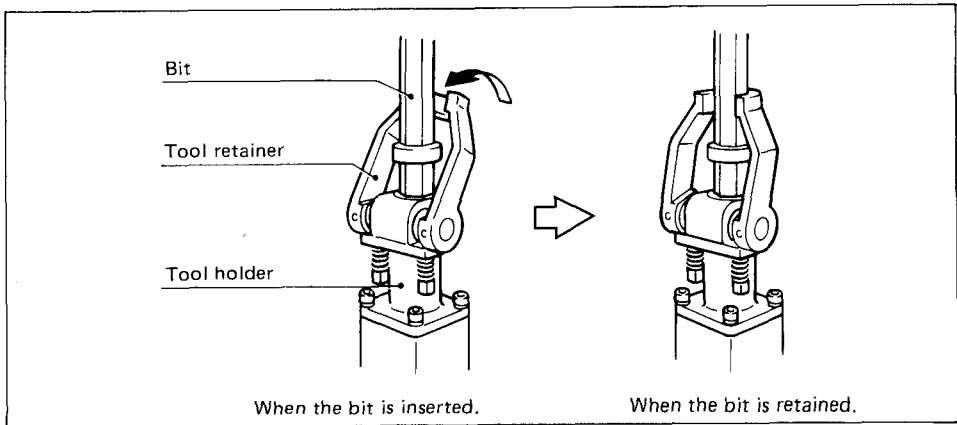


Fig. (1)

CAUTION:

Always assure that the bit is securely retained by attempting to pull the bit out of the tool holder after completing the above procedure.

(2) For bits without a collar:

Pivot the tool retainer back and slightly downward. With the notched portion of the bit facing the tool retainer shaft, insert the bit into the tool holder as far as it will go. Then pivot the tool retainer further downward toward the cylinder A to securely retain the bit.

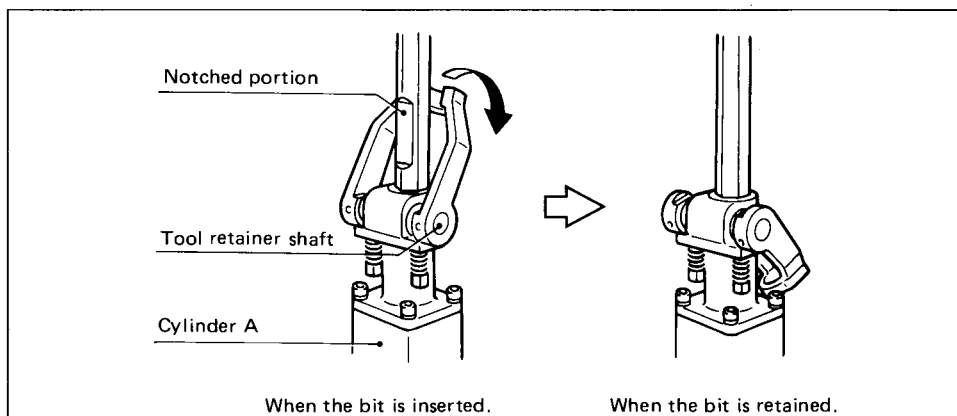


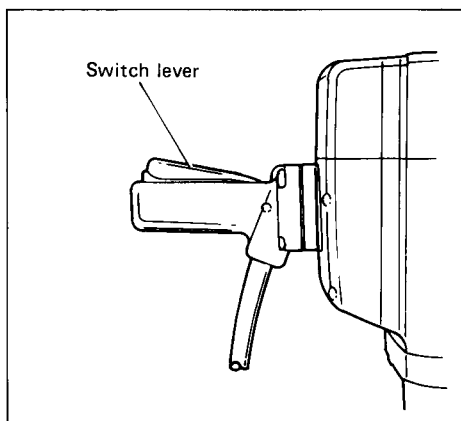
Fig. (2)

CAUTION:

- * Always assure that the bit is securely retained by attempting to pull the bit out of the tool holder after completing the above procedure.
- * The bit without a collar cannot be retained by the method shown in the figure (1).

Switch action

To start the tool, simply squeeze the switch lever. Release the switch lever to stop.



Operation

Hold the tool firmly with both hands. Turn the tool on and apply slight pressure on the tool so that the tool will not bounce around, uncontrolled. Pressing very hard on the tool will not increase the efficiency.

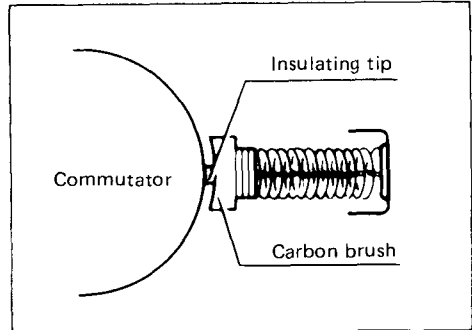
MAINTENANCE

CAUTION:

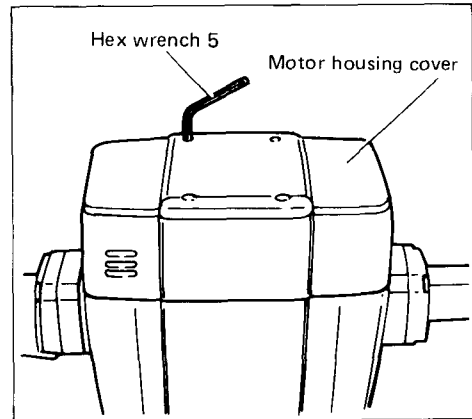
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

Replacing carbon brushes

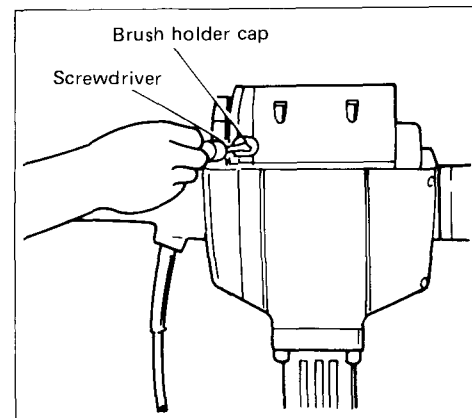
When the resin insulating tip inside the carbon brush is exposed to contact the commutator, it will automatically shut off the motor. When this occurs, both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



Use a hex wrench 5 to remove the motor housing cover.



Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

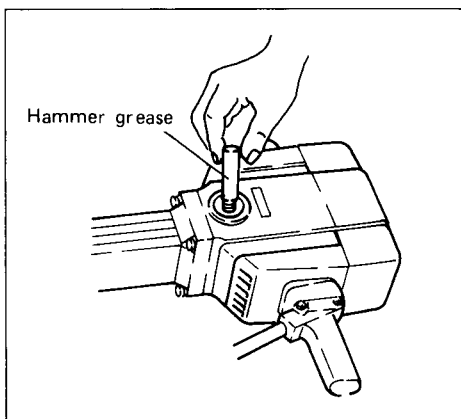
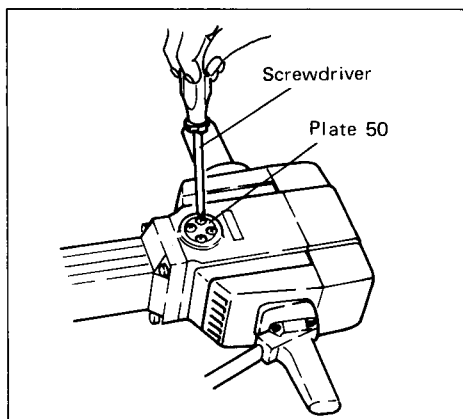


Lubrication

This tool requires no hourly or daily lubrication because it has a grease-packed lubrication system. It should be relubricated after every 6 months of operation. Send the complete tool to Makita Authorized or Factory Service Center for this lubrication service. However, if circumstances require that you should lubricate it by yourself, proceed as follows.

First, switch off and unplug the tool. Remove plate 50 using a screwdriver, then replenish with fresh grease (30 g; 1 oz). Use only Makita genuine grease (optional accessory). Filling with more than the specified amount of grease (approx. 30 g) can cause faulty hammering action or tool failure. Fill only with the specified amount of grease.

Reinstall plate 50 and secure with the screws.



To maintain product **SAFETY** and **RELIABILITY**, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

CAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

- **Hex wrench 5**

Part No. 783203-8



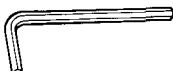
- **Hex wrench 6**

Part No. 783204-6



- **Hex wrench 10**

Part No. 783207-0



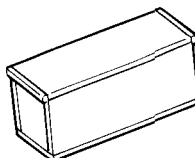
- **Hammer grease (30 cc)**

Part No. 181490-7



- **Wooden carrying case**

Part No. 821176-8



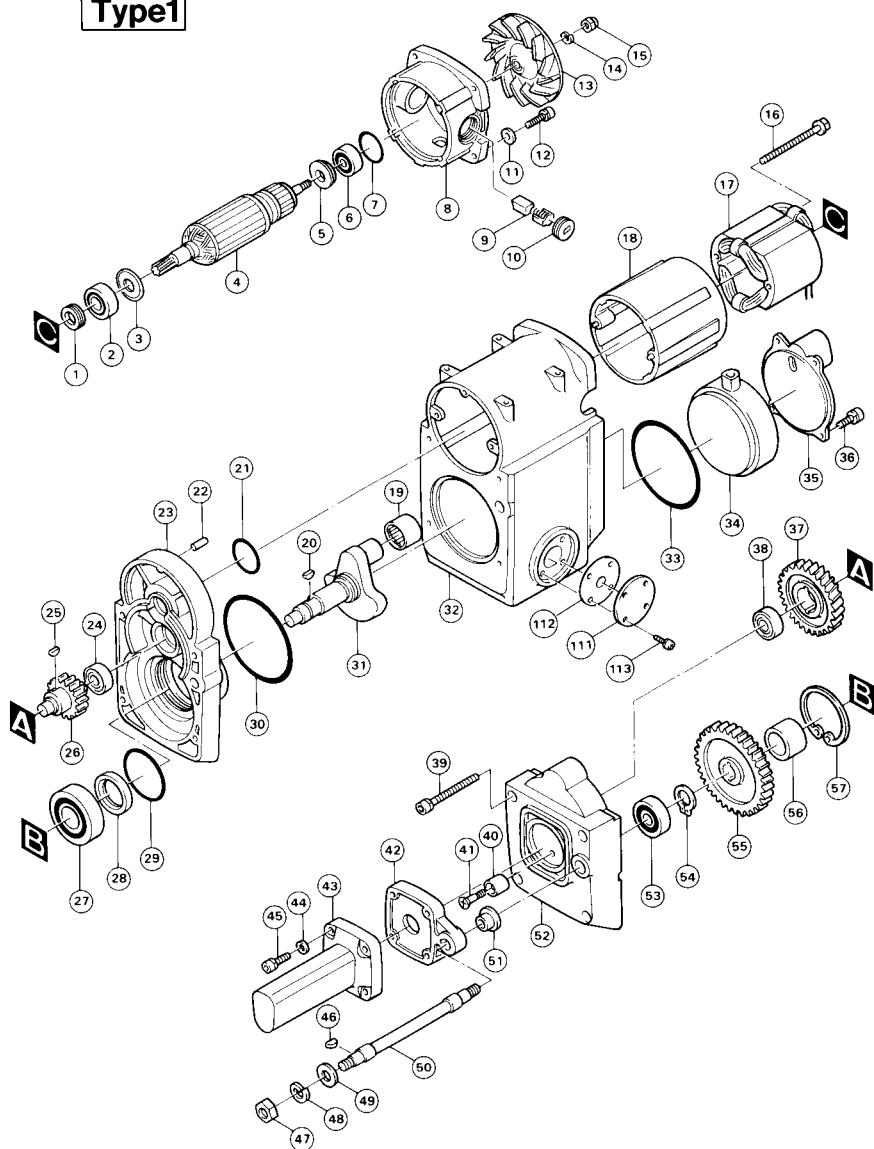
- **Safety goggles**

Part No. 191686-2

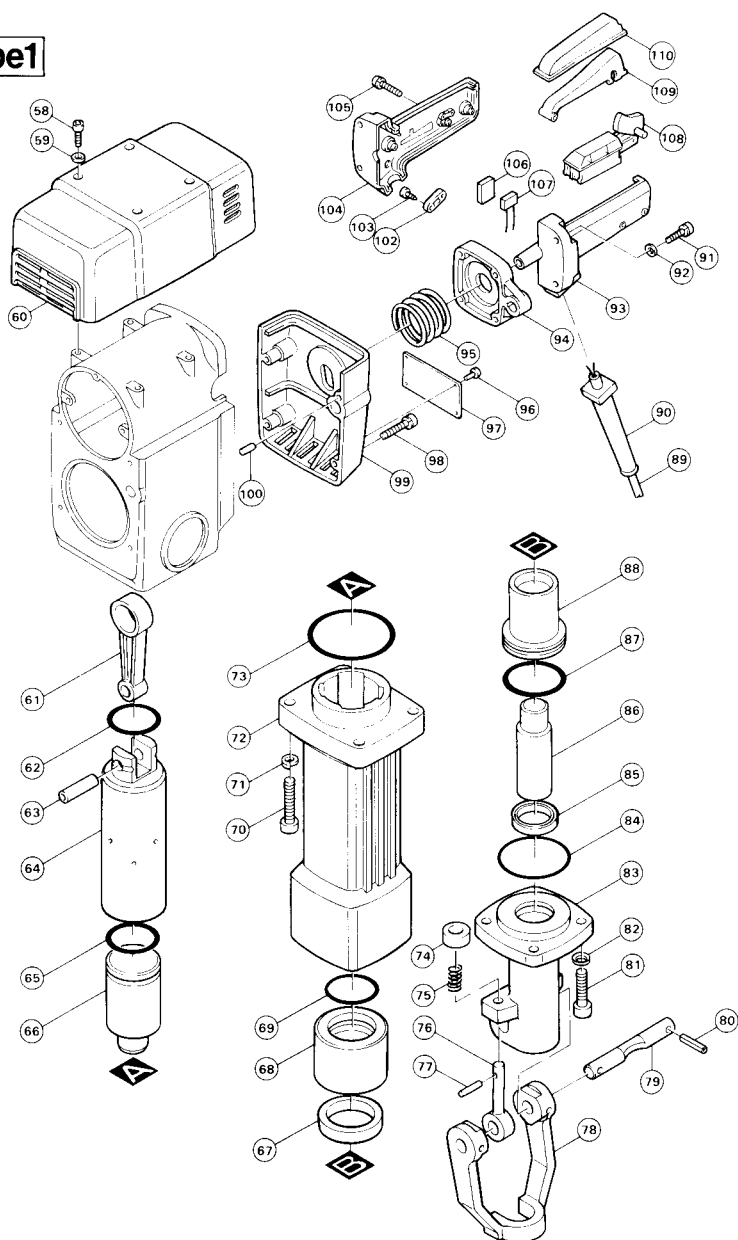


BREAKER HAMMER Model HM1800

Type1



Type1



Note: The switch, noise suppressor and other part configurations may differ from country to country.

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MACHINE			MACHINE		
1	1	Screw Seal	56	1	Sleeve 25
2	1	Ball Bearing 6203LLB	57	1	Retaining Ring R-62
3	1	Washer 17	58	4	Hex. Socket Head Bolt M6x20 (With Washer)
4	1	ARMATURE ASSEMBLY	59	4	Flat Washer 6
		(With Item 1 - 6)	60	1	Motor Housing Cover
5	1	Insulation Washer	61	1	Connecting Rod
6	1	Ball Bearing 6200LLB	62	1	O Ring 35
7	1	O Ring 30	63	1	Sleeve 8
8	1	Motor Housing B	64	1	Piston Cylinder
9	2	Carbon Brush	65	1	O Ring 52
10	2	Brush Holder Cap	66	1	Sinker
11	4	Flat Washer 6	67	1	Rubber Ring 54
12	4	Hex. Socket Head Bolt M6x25 (With Washer)	68	1	Cylinder B
13	1	Fan 100	69	1	O Ring 53
14	1	Spring Washer 8	70	4	Hex. Socket Bolt M12x55
15	1	Hex. Lock Nut M8 - 13	71	4	Spring Washer 12
16	2	Hex. Bolt M5x85 (With Washer)	72	1	Cylinder A
17	1	Field	73	1	O Ring 85
18	1	Motor Housing A	74	2	Retainer Ring
19	1	Needle Bearing 2520	75	2	Compression Spring 12
20	2	Woodruff Key 4	76	2	Tool Retainer Pole
21	1	O Ring 40	77	2	Pin 4
22	1	Pin 5	78	1	Tool Retainer
23	1	Gear Housing	79	1	Tool Retainer Shaft
24	1	Ball Bearing 6202	80	2	Spring Pin 8 - 40
25	2	Woodruff Key 4	81	4	Hex. Socket Bolt M12x45 (With Washer)
26	1	Spur Gear 22	82	4	Spring Washer 12
27	1	Ball Bearing 6305LLB	83	1	Tool Holder 29
28	1	Oil Seal 35	84	1	O Ring 75
29	1	O Ring 61	85	1	X Ring 40
30	2	O Ring 80	86	1	Impact Bolt
31	1	Crank Shaft	87	1	O Ring 60
32	1	Crank Housing	88	1	Impact Bolt Holder
33	1	O Ring 90	89	1	Cord
34	1	Crank Housing Cap	90	1	Cord Guard
35	1	Cap Cover	91	4	Hex. Socket Head Bolt M6x25 (With Washer)
36	4	Pan Head Screw M5x18 (With Washer)	92	4	Flat Washer 6
37	1	Helical Gear 50	93	1	Handle Set (With Item 104)
38	1	Ball Bearing 6202	94	1	Handle Base
39	4	Hex. Socket Head Bolt M6x75 (With Washer)	95	2	Compression Spring 46
40	1	Rubber Sleeve 8	96	4	Rivet 0 - 5
41	1	Countersunk Head Screw M8x28	97	1	Name Plate
42	1	Handle Base	98	3	Hex. Socket Head Bolt M6x35 (With Washer)
43	1	Side Handle	99	1	Rear Case
44	4	Flat Washer 6	100	1	Pin 5
45	4	Hex. Socket Head Bolt M6x25 (With Washer)	102	1	Strain Relief
46	2	Woodruff Key 4	103	2	Tapping Screw 4x25 For Flange
47	2	Hex. Nut M12	104	1	Handle Set (With Item 93)
48	2	Spring Washer 12	105	3	Pan Head Screw M5x28 (With Washer)
49	2	Flat Washer 12	108	1	Switch
50	1	Handle Shaft	109	1	Switch Lever
51	2	Nylon Bush 15	110	1	Dust Cover
52	1	Gear Housing Cover	111	1	Plate 50
53	1	Ball Bearing 6302	112	1	Packing 50
54	1	Retaining Ring S-20	113	4	Pan Head Screw M5x12 (With Washer)
55	1	Spur Gear 47			

Note: The switch and other part specifications may differ from country to country.

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others;
- repairs are required because of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

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883829B069

PRINTED IN JAPAN
1995-3-N